

S/148/60/000/012/005/020  
A:61/A:33

AUTHORS: Tarnovskiy, I. Ya.; Khasin, G. A.; Pozdeyev, A. A., and  
Meandrov, L. V.

TITLE: Plasticity of some steel grades at high temperatures

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya,  
no. 12, 1960, 63 - 69

TEXT: The conventional laboratory methods can only give indirect data on the plasticity in relation to one of the multitude of factors existing in real pressure working processes. It is therefore often better to use the simplest test methods - tension and impact bending. Eighteen alloy steel grades of different structure groups and applications have been tested using these common heat tests. The results are presented in tables and graphs. The 18 grades are divided into two groups - "a" and "b" (The chemical compositions are not included). The "a" includes: "45"; Y12A (U12A); 60C2 (60S2); 18KHBA (18KhNVA); 18X15C1 (ShKh15SG), 18X18H9T (18X18N9T); 4X13 (4Kh13); X17H2 (Kh17N2); X18H12M2T (Kh18N12M2T); X18H25C2 (Kh18N25S2); X25105 (Kh25105); and the "b" - R18 (R18); X23H18

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Plasticity of some steel grades at...

(Kh23N18); 1X13 (1Kh13); 4X14H14B2M (4Kh14N14V2M); 9M-48 (EI-48). Relative elongation ( $\delta$ , %) follows two different laws: a continuous rise from 800 to 1,200°C (Fig. 1, a), and a rise to a maximum and drop after it (Fig. 1, b). A common feature of the "b" group, except for Kh23N18, is the high carbide content. In the Kh9S2 grade  $\delta$  changes peculiarly (Fig. 1, c) - drops to almost a half and rises rapidly after the minimum at 900 - 1,100°C. Reduction of area ( $\psi$ , %) follows the same law but with less varying absolute values. In the "a" group grades the  $\psi$  grows continually (or stays at 100%), and in the "b" group it reaches the maximum at 1,000 - 1,100°C and goes down. An intense grain growth in the 900 - 1,100°C range is characteristic for silchrome steel. In most of the steel grades  $\psi$  reached 100% at 1,200°C or earlier, and in some cases it did not exceed 80-90%. Consequently, the trend of the plasticity indices  $\delta$  and  $\psi$  at high temperatures is practically the same, and they are equivalent until the formation of the neck on specimens, but after it the  $\psi$  value gives a more complete plasticity characteristic. Nevertheless, both factors should be considered in combination. The "a" group steel has the highest plasticity through the whole temperature range of hot pressure working, but it must be born in mind that in complex

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stress conditions (e.g., tube piercing), the properties might be different, as well as that the obtained  $\delta$  and  $\psi$  values might not be true for Kh18N9T, Kh18N12M2T and Kh17N2 in the case of a high ferrite content. Particular care is recommended in selecting the process parameters (temperature in particular) for the "b" group, for a large part of these grades contains a high quantity of primary carbides and includes low-melting eutectics in the cast structure. The impact strength ( $\alpha_K$ ) drop with raising test temperature from 800 to 1,250°C was common for all investigated steel grades (Fig. 2). All grades (except Kh23N18) with  $\alpha_K$  varying as 1 were the most plastic, the specimens bent without rupture; grades with an impact strength varying as 2 broke in tests with only few exceptions; they belonged to the group "b" in tension tests. The conclusion is that impact strength variation is opposite to the plasticity variation at a high temperature range and cannot be used for the plasticity indices in this case. It must always be evaluated jointly with deformation resistance test results in equal test conditions. The obtained data can be used to determine the optimum temperature range for different steel grades, as well as for subdividing the grades into groups for similar technological treatment. A further systematization of test data is advised. There are 3 tables and 2 figures.

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Plasticity of some steel grades at...

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ASSOCIATION: Ural'skiy politekhnicheskii institut (Ural Polytechnic Institute)

SUBMITTED: March 22, 1960

Card 4/6

MEANDROV, L.V.; TARNOVSKIY, I.Ya.; POZDEYEV, A.A.

Methods for a rapid testing of steel at high temperatures. Zav.  
lab. 26 no.2:201-203 '60. (MIRA 13:5)

1. Ural'skiy politekhnicheskii institut imeni S.M.Kirova.  
(Steel--Testing)

TARNOVSKIY, I. Ya., prof.; MEANDROV, L.V., aspirant

Mechanical properties of alloyed steels at high temperatures.  
Trudy Ural.politekh. inst.no.78:24-37 '60. (MIRA 14:5)  
(Metals at high temperatures)  
(Steel alloys--Testing)

S/148/61/000/003/006/015

A161/A133

AUTHORS: Tarnovskiy, I. Ya., Pozdeyev, A. A., Meandrov, L. V., Khasin, G. A.

TITLE: The dependence of the deformation resistance on the ductile properties of steel in hot pressure working

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya, no. 3, 1961, 82 - 90

TEXT: Tests have been carried out with the upsetting of 16 different steel grades at 900 - 1,200°C and three different deformation rates: 0.05; 7.5 and 150 sec<sup>-1</sup>. The article presents details of the experiment techniques, the data obtained in the form of graphs, and derivations of formulae. The graphs present the real stress value variations with the deformation degree, as well as with deformation rate at different temperatures. The growth of deformation resistance (i.e., hardening) of some steel grades at 1,100 - 1,200°C, and a low deformation rate were found to be so insignificant that the yield limit or ultimate strength could be used as deformation resistance characteristic, but at high deformation rates the steel behaviour was different, and the conclusion was drawn that the effect of the deformation degree should by all means be taken into account for all the steel types studied. The increase in the deformation rate also considerably raised the de-  
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The dependence of the deformation resistance on ...

formation resistance. A formula was derived that expresses the behavior of the majority of the 16 steel grades with sufficient accuracy:

$$\sigma_{\eta\eta} = \sigma_0' + K \ln \left( 1 + \frac{\xi_n}{\xi_0} \right) \quad (2)$$

where  $\sigma_{\eta\eta}$  is the deformation resistance during linear stressed state and  $\xi_0$  rate;  $\sigma_0'$  - the deformation resistance at zero deformation rate;  $\xi_0$  - the deformation rate during static tests;  $\xi_n$  - any deformation rate; K - a coefficient that depends on the steel grade, temperature and deformation degree, in kg/mm<sup>2</sup>. The coefficient presents in a physical sense the "tough resistance of metal to deformation". Its connection with the toughness factor is analysed; and a table is included giving the numerical values of K and  $\sigma_0'$  calculated for two of the studied steel grades (at different temperatures and deformation rates) - 18XHBA (18KhNVA) and X18H12M2T (Kh18N12M2T) steel. It is pointed out that the simplified ductility equation for flat employed usually in pressure working theory

$$\sigma_1 - \sigma_3 = 1.15 \sigma_0 \quad (5)$$

does not sufficiently express the real properties of steel at high temperatures. The new equation of tough-ductile state derived from experimental data is

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The dependence of the deformation resistance on the ...

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$$\sigma_1 - \sigma_3 = 1.15\sigma_s' + 4\mu_{\text{mean}}' \left| \frac{\sigma_1}{\sigma_s'} \right| \quad (6)$$

where  $\mu_{\text{mean}}'$  is the mean (for the entire body volume) value of the toughness coefficient at the given deformation moment, and  $\sigma_s'$  - the extrapolated yield limit that accounts at any given moment for the degree of the preceding deformation of the body. Equations are derived also for the case of any stressed state. The numerical values of the K coefficient render it easy to find the toughness coefficient for heated steel also under different deformation conditions. There are 7 figures and 4 Soviet-bloc references.

ASSOCIATION: Ural'skiy politekhnicheskiy institut (The Ural Polytechnic Institute)

SUBMITTED: July 20, 1959

Card 3/3

TARNOVSKIY, I.Ya.; POZDNEV, A.A.; MEANDROV, L.V.

Physical equations for the mechanics of a deformed ~~solid~~ in the  
press forging theory. Izv.vys.ucheb.zav.; chern.met. no.4:67-78  
'61. (MIRA 14:4)

1. Ural'skiy politekhnicheskiy institut.  
(Forging) (Deformations (Mechanics))

USTIMENKO, V.A.; MEANDROV, L.V.

Investigating the deformation of a steel-nickel bimetal under  
the effect of hot rolling. TSvet. met. 36 no.6:64-68 Je '63.  
(MIRA 16:7)  
(Laminated metals) (Rolling (Metalwork))

S/133/63/000/002/011/014  
A054/A126

AUTHORS: Meandrov, L.V., Candidate of Technical Sciences, Ustimenko, V.A.,  
Engineer

TITLE: At the Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii im. I.P. Bardina (Central Scientific Research Institute of Ferrous Metallurgy im. I.P. Bardin)

PERIODICAL: Stal'; no. 2, 1963, 157

TEXT: At this institute and the Test Plant of TsNIICHM two methods of bi-metal production were tested: coating by casting and rolling in packs. The best results were obtained when rolling 4-layer symmetric packs with separating layers. The reduction for such packs - between 1,250 and 900°C must be at least 50%; the contact surfaces need no finishing. Oil films must be prevented from entering the packs to eliminate lamination. The distribution of specific reduction for the single layers depends on the ratio between the deformation resistances of the layers at given temperatures and on the degree and rate of their deformation. Between 800 and 900°C the deformation resistance of Cr.3 (St.3)

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At the Tsentral'nyy nauchno-issledovatel'skiy ....

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grade steel exceeds that of nickel; the opposite occurs at 1,100 - 1,200°C. A new stainless material has been developed at the Kommunar'skiy metallurgicheskiy zavod (Kommunar. Metallurgical Plant). It consists of large-sized bimetal, double-layer sheets with a nickel coating. The material is rolled in 4-layer packs (240 x 750 x 1,700 mm) on the 2,800 stand. Next 11 + 13 x 500 + 1,700 x x 4,000 + 6,000 mm sheets were coated with a 2-mm nickel layer and used in making equipment for chemical plants. The test sheets displayed a 32 - 46 kg/mm<sup>2</sup> strength limit, 23 - 32% relative elongation and an inter-layer shear resistance of 19 - 29 kg/mm<sup>2</sup>. Upon analyzing, a considerable C, Si, Ni and Fe diffusion was observed in a 30 - 35 μ thick border layer. The production costs of these bimetal sheets are not higher than 28% of the production costs of pure nickel sheets; the process saves 2,250 rubles/ton and 700 kg nickel/ton of sheet.

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S/133/63/000/004/005/011  
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AUTHORS: Meandrov, L. V., Golovanenko, S. A., Bykov, A. A., Myagkov, A. P.,  
Korotkevich, B. M., Borisov, A. N., Kassovskiy, L. D., Gindin, A. Sh.

TITLE: Experimental rolling of bimetal sheets

PERIODICAL: Stal', no. 4, 1963, 343 - 346

TEXT: Tests were carried out at the Chelyabinskiy metallurgicheskiy zavod (Chelyabinsk Metallurgical Plant) with the participation of N. P. Shchukin, V. D. Nikitin, S. A. Zuyev, V. P. Nikitin, N. N. Danilovich, N. V. Zerchaninov, V. V. Shturts, V. A. Ustimenko, V. V. Silant'yev, to establish the technology of bimetal sheet production. Symmetric (4-layer, 150 - 220 mm thick) and asymmetrical (3-layer, 135 mm thick) sheets were produced. The nickel coating was applied in some tests by the standard electrolytic method, in some tests, however, a new process was employed with a special apparatus, involving the melting of a 1.5-mm diameter nickel wire, which was thereupon applied to the sheet surface by pulverization. Prior to this the surface to be coated was shot-blasted. A 600 x 1,750 mm sheet could be coated by this process with a 40  $\mu$  thick nickel layer

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# Experimental rolling of bimetal sheets

in 20 minutes. The new method proved more advantageous than the conventional one: it required less time and no pickling. The pulverizing apparatus is simple, inexpensive and easily adjustable to automation. After coating the bimetal sheets were welded air-tight on the perimeter and the end surfaces. The rolling tests were made on a 2,300-mm stand at Chelyabinsk by the standard method. The welding seams prevented warping and lamination of the bimetal sheets. The tightness and the strength of the seams depended on the surface quality of the stainless and carbon steels composing the sheet and on the assembly and welding of the sheet layers. The deformation of the various layers in rolling was not uniform. This deviation in deformation was characterized by an experimental coefficient that in case of 4 - 10 mm thick sheets depended in the first place on the metal grade of the coating layer, but was independent of the total reduction in the investigated range of deformations. For sheets of Cr.3cn/St.3sp + X 18 H10T / Kh18N10T grades the average coefficient value was 0.94 - 0.96, for sheets of St.3sp + 1X 13/1Kh13 steel grades: 1.03 - 1.05. There are 4 figures and 1 table.

ASSOCIATION: TsNIIChM, Chelyabinskiy NIIM (Chelyabinsk NIIM, GPMZ)

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L 12891-63 EWP(k)/EWP(q)/EWT(m)/BDS AFFTC/ASD Pf-4 JD/HW-2  
ACCESSION NR: AP3001422 S/0136/63/000/006/0064/0068 63

AUTHOR: Ustimenko, V. A.; Meandrov, L. V. 27 6

TITLE: Investigation of deformation of steel-nickel bimetal during hot-rolling 16

SOURCE: Tsvetnyye metally\*, no. 6, 1963, 64-68 18

TOPIC TAGS: deformation of bimetal, steel-nickel bimetal, hot rolling

ABSTRACT: Authors carried out a series of experiments to establish a proper manufacturing method for nickel-plated bimetallic sheets, to define the basic factors controlling the degree of adhesive strength of bimetallic sheets, and to determine the extent of deformation of a bimetal nickel-steel in hot-rolling. The experiments, which were conducted with different sheets at different temperature intervals and with different number of roll passes, showed that, in all cases, the relative shrinkage of each component is directly proportional to the total shrinkage of the bimetal. Orig. art. has: 5 figures.

ASSOCIATION: none

Card 1/4



MEANDROW, L.V.; USTIMENKO, V.A.

Investigating the deformation of the layers of a bimetall during  
its working by pressure. Izv. vys. ucheb. zav.; Chern. met. 6  
no.11:109-112 '63. (MIRA 17:3)

1. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy  
metallurgii.

MEANDROV, L.V.; GOLOVANENKO, S.A.; TARLINSKIY, D.I.; BYKOV, A.A.

Pack rolling of two-layer stainless steel. ~~16~~ Biul.tekh.-ekon.inform.  
Gos.nauch.-issl.inst.nauch.i tekhn.inform. 16 no.8:6-9 '63.  
(MIRA 16:10)

GLADYREVSKAYA, S.A.; MEANDROV, L.V.; GOLOVANENKO, S.A.; BYKOV, A.A.;  
KLINOV, I.Ya., doktor tekhn. nauk, prof., retsenzent;  
BLAGOSKLONOVA, N.Yu., inzh., red.

[Two-layer steel in chemical machine building] Dvukhsloinye  
stali v khimicheskom mashinostroenii. Moskva, Mashinostroenie,  
1965. 151 p. (MIRA 18:5)

L 36134-66 ENT(m)/EWP(v)/T/EWP(t)/ETI/EWP(k) IJP(c) JD/HM/HW  
 ACC NR: AT6016760 (N) SOURCE CODE: UR/2776/65/000/042/0045/0054 57  
 52  
 211  
 AUTHOR: Meandrov, L. V.; Bykov, A. A.  
 ORG: none  
 TITLE: Rolling of large-sized bimetal sheets with a cladding layer of highly deformation-resistant steel  
 SOURCE: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii. Sbornik trudov, no. 42, 1965. Proizvodstvo bimetallov (Production of bimetals), 45-54  
 TOPIC TAGS: METAL DEFORMATION; corrosion resistant steel, carbon steel, bimetal, metal cladding, metal rolling, chemical plant equipment / OKh23N28M3D3T corrosion resistant steel, St.3 carbon steel  
 ABSTRACT: The article describes the development of the optimal regime for the fabrication of bimetal sheets with a cladding layer of OKh23N28M3D3T (EI943) corrosion-resistant stainless steel, (0.06% C, 0.8% Si, 0.8% Mn, 22-25% Cr, 26-29% Ni, 0.4-0.7% Ti, 2.5-3.0% Mo, 0.02% S, 0.035% P, 2.5-3.5% Cu) and a base layer of St. 3 carbon steel, designed for the construction of railroad acid cisterns and chemical apparatus. The principal problem was that of rolling slabs of EI943 steel into 16-30 mm thick sheets prior to their assembling and welding with sheets of the base metal. Since the temperature range of hot deformation (1100-1170°C) for EI943 steel is much

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ACC NR: AT6016760

lower than for St. 3 carbon steel, forged sheet bars of EI943 steel were hot-rolled into thinner sheets at  $<1050^{\circ}\text{C}$ . The metal thus rolled displayed no cracks and tears. Another problem was that of the high  $\text{Cr}^{12}$  content of EI943 steel, this being conducive to exfoliation of the bimetal sheets. In the course of experiments it was established that protective galvanic coating with nickel<sup>1</sup> eliminates this danger. The bimetal sheets themselves are produced by rolling assembled and welded four- and two-layer packs (Fig. 1), the former being subsequently separated into two two-layer sheets.

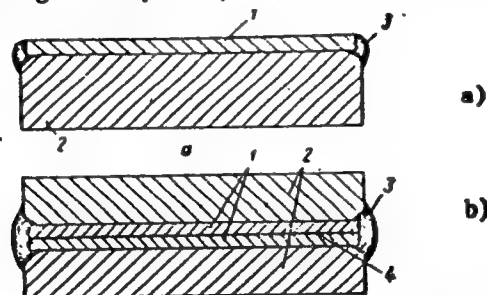


Fig. 1. Methods of assembling two-layer (a) and four-layer (b) packs in laboratory conditions:

1 - cladding metal; 2 - base metal; 3 - weld; 4 - separating layer

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ACC NR: AT6016760

Thus, by adapting the preliminary hot rolling temperatures to the fact that EI493 steel is an austenitic steel with an extremely complex structure which causes it to display a higher deformation resistance and lower plasticity than ordinary steels, and by developing a method of offsetting the adverse effect of the high Cr content of this steel on the strength of adhesion between cladding layer and base layer, it was possible under conditions of experiment to roll one ton of bimetal sheets measuring 5 and 10x190x290 mm, on expending ~260 kg of EI943 steel (20% cladding by weight) for this purpose. Orig. art. has: 4 figures, 3 tables.

SUB CODE: 13, 11 / SUM DATE: none/ ORIG REF: 001/

joining of dissimilar metals 1/1

pack rolling 1/1

Card 3/3 *lll*

L 36137-66 EWT(d)/EWT(m)/EWP(v)/T/EWP(t)/ETI/EWP(k)/EWP(h)/EWP(l) IJP(c)

ACC NR: AT6016763 JD/HM/HW(N) SOURCE CODE: UR/2776/65/000/042/0070/0076

AUTHOR: Meandrov, L. V.; Bykov, A. A.; Shilkin, Yu. V.; Sonin, S. I.; Dus', V. V.; Chernyshov, O. G.

ORG: none

TITLE: Rolling of nickel-steel-nickel sandwich strip

SOURCE: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii, Sbornik trudov, no. 42, 1965. Proizvodstvo bimetallov (Production of bimetals). 70-76

TOPIC TAGS: ELECTRONIC EQUIPMENT, ROLLING mill, bimetal, nickel, steel, metal rolling / "450" ROLLING MILL

ABSTRACT: The use of laminated Ni-steel-Ni strip would make it possible to save nickel in the production of Ni strip designed for the fabrication of various electronic instruments. Accordingly, the authors describe the pack-rolling method they developed for this purpose. Ni sheets measuring 5x195x295 mm and St.3 steel sheets measuring 25x200x300 mm, were welded together, heated to 1250°C and rolled in a "450" sheet mill into 3 mm thick bimetal (7 roll passes). The resulting product was pickled and cut into 90 mm wide strips which were cold-rolled in a four-high stand to a thickness of 0.2 mm. The mechanical properties of the finished 0.2 mm thick strip were found to be satisfactory. Subsequent pilot-industrial production of this strip revealed some shortcomings in the strength of adhesion between the sheets; this was remedied by changing

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ACC NR: AT6016763

the design of the welding groove to a swallowtail shape. As ultimately worked out under industrial conditions, the flowsheet for the production of this strip is as follows: a) preparation and assembling of bimetal sandwich strip; b) hot rolling of strip to 3.0-3.5 mm; c) pickling; d) cold rolling to thickness of 1.8-2.0 mm; e) cutting to 200 mm width; f) bright annealing; g) cold rolling to 0.60 mm; h) bright annealing; i) cold rolling to 0.1, 0.2 and 0.3 mm; j) cutting, heat treatment and finishing of strip. Tests of components of electronic apparatus manufactured from Ni-steel-Ni sandwich strip produced positive results. Orig. art. has: 3 figures, 3 tables.

SUB CODE: 13, 11, 09/ SUBM DATE: none/ ORIG REF: 001

Joining of Dissimilar Metals

Card 2/2



ACC NR: AM7003015

(A)

Monograph

UR/

Golovanenko, Sergey Aleksandrovich; Meandrov, Lev Vyacheslavovich

Bimetal production (Proizvodstvo bimetallov) [Moscow] Izd-vo "Metallurgiya",  
66, 0303 p. illus., biblio., tables. 3,500 copies printed

TOFIC TAGS: bimetal, metallurgy, bimetal production

PURPOSE AND COVERAGE: The properties of bimetals, areas of their application, and their advantages over single-layer metals are analyzed and discussed. Results obtained in theoretical and experimental studies on bimetal production processes are cited and methods of producing bimetals are described; an evaluation of these methods is given. The production of various types of bimetals and the specific features of the manufacture of articles from them are analyzed. The book is intended for engineers and technicians working in metallurgical, machine-building, radio technological, electrotechnical and related industries and for students in technical schools preparing to work in these fields. The authors express their thanks to members of the Laboratory of Bimetals of the Central Scientific Research Institute of Ferrous Metals for assistance rendered in carrying out experimental studies.

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UDC: 621.771.8(06)

ACC NR: AM7003015

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bimetals -- 59

Ch. 3. Methods of obtaining bimetals -- 160

Ch. 4. Production of various types of bimetals -- 207

Ch. 5. Characteristics in the manufacture of articles from bimetals -- 277

Literature -- 297

SUB CODE: 11/ SUBM DATE: 22Aug66/ ORIG REF: 146/ OTH REF: 024

Card 2/2

MEANDROV, M.S.

Instructors shifts in deep prospecting drilling for training in  
advanced work methods. Razved. i okh. nedr. 30 no.6:44-46 Je '64.  
(MIRA 17:10)

1. Glavnoye upravleniye geologii i okhrany nedr pri Sovete Ministrov  
RSFSR.

MEASNICOV, M., ing.

Agrotechnical recording, a basic condition in the continuous improvement of the territory organization. Rev geodezie 6 no.3:68-71 '62.

1. Institutul agronomic "N. Balcescu".

MEASNICOV, M., ing.

Eight International Congress on Soil Science. Re~~g~~ geodezie  
8 no.4:68-69 '64.

MEASNICOV, M., ing.

Congress of the International Association of Geodesists and  
Geophysicists and its problems. Rev geodezie 8 no. 3:94-95  
'64

MEBAGISHVILI, L.N.

Indices of external respiration during extrapleural pneumothorax  
or celothorax therapy and after its discontinuation. Soob.AN  
Gruz.SSR 28 no.1:111-118 Ja '62. (MIRA 15:4)

1. Tbilisskaya i klinicheskaya tuberkuleznaya bol'nitsa.  
Predstavleno chlenom-korrespondentom Akademii D.M.Gedevanishvili.  
(TUBERCULOSIS)

MEBEL', B.D.

Treatment of typhoid and paratyphoid diseases with ACTH in combination with levomycin. Sovet. med. 23 no.2:70-77 F '59. (MIRA 12:3)

1. Iz kafedry infektsionnykh bolezney (ispolnyayushchiy obyazannosti zav. - dots. N.V. Chernov) i Leningradskogo meditsinskogo instituta imeni I. P. Pavlova i Leningradskoy infektsionnoy bol'nitsy imeni S. P. Botkina (glavnyy vrach M.M. Figurina).

(TYPHOID FEVER, ther.

ACTH with chloramphenicol (Rus))

(PARATYPHOID FEVER ther.

same)

(ACTH, ther. use

typhoid & paratyphoid fever, with chloramphenicol (Rus))

(CHLOROMYCETIN, ther. use

typhoid & paratyphoid fever, with ACTH (Rus))



MEBEL', B.D.

Use of ACTH in combination with levomycetin in typhoid and paratyphoid diseases in children. Vop. okh, mat. i det. 6 no.3:56-60 Mr '61.  
(MIRA 14:10)

1. Iz kafedry infektsionnykh bolezney (ispolnyayushchiy obyazannosti zavednyushchego - dotsent N.V.Chernov) i Leningradskogo meditsinskogo instituta imeni akad. I.P.Pavlova i Leningradskoy infektsionnoy bol'nitsy imeni S.P.Botkina (glavnyy vrach M.M.Figurina).  
(ACTH) (CHLOROMYCETIN) (TYPHOID FEVER)  
(PARATYPHOID FEVER)

ALISOV, P.A., general-mayor meditsinskoy sluzhby, prof.; BOLDASOV, V.K.,  
kand. med. nauk; KAZANTSEV, A.P., podpolkovnik meditsinskoy sluzhby,  
doktor med. nauk; NEMIRO, Ye.A.; TARASOV, V.N., kand. med. nauk;  
MEBEL', B.D., kand. med. nauk

Experience in clinical and laboratory diagnosis of acute res-  
piratory diseases in man. Voen.-med. zhur. no. '1:49-53 Ja '66  
(MIRA 19:2)

MEBEL', D.M.

New scanning device for the multichannel pulsed control system  
"Mir". Priborostroenie no.10:22-23 0 '64.

(MIRA 17:11)

L 7957-66 EWT(1)/EWA(h)

ACC NR: AP5025739

SOURCE CODE: UR/0286/65/000/018/0089/0089

AUTHORS: Mebel', D. M.; Pevner, V. V.; Shapiro, Yu. M.

ORG: none

TITLE: Phase sensitive voltage converter. Class 42, No. 174836

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 18, 1965, 89

TOPIC TAGS: transistorized circuit, voltage regulator 25

ABSTRACT: This Author Certificate presents a phase sensitive voltage converter. An alternating voltage supplied to the input produces both a constant and a rectangular voltage of the same frequency at the output with filtering of the reactive unbalance. The sum of a constant and alternating voltage produces a rectangular voltage at the output free of the reactive component. To simplify the device, the transistor emitters of two semiconductor switches are connected through filtering capacitors to the load and to the signal source. The collectors are connected to the second terminals of the source and load. A reference voltage of opposite phase is supplied to the transistor bases.

SUB CODE: EC/ SUBM DATE: 17Jul63

Card 1/1 OC

UDC: 621.314.5

MEBEL', M. I. Cand. Med. Sci.

Dissertation: "Clinical Treatment, Psychopathology and Therapy of Peliagrous Psychoses." Central Inst. for Advanced Training of Physicians. 25 Mar 47.

SO: Vechernyaya Moskva, Mar, 1947 (Project #17836)

L 29951-65 EWT(d)/ENP(1) Po-h/Pq-h/Pg-h/Fk-h/Pl-h LJP(e) EC

ACCESSION NR: AP5008010

5/0119/64/000/010/0022/0023

AUTHOR: Mabel', D. M.

TITLE: New sampling device for the the multichannel pulsed control system "MIR" 45  
B

SOURCE: Pribozastroeniye, no. 10, 1964, 22-23 9

TOPIC TAGS: automatic control system, electronic circuit, electronic equipment/  
MIR automatic control system

Abstract: The control system "Mir," produced by the Moscow Factory for the Automation of Thermal Equipment, is utilized in numerous industrial enterprises. It is relatively simple and inexpensive, but the basic part of its circuitry the sampling device OU-25 proved to be quite unreliable due to the poor performance of the cold cathode thyatrona MTKh-90 (having a lifetime of not more than 100 hours). The article describes the new, more reliable setup OU-25P which increased the frequency of point sampling from 10 to 60 points per second. It discusses the circuits for pulse generator, signaling of limiting deviations, manual setting of the interaction time with the executing mechanism, correction control of setup, registering relay, and power supply. Orig. art. has 1 diagram.

Card 1/2

L 29951-65

ACCESSION NR: AP5000010

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: IE, EC

NO REF SOV: 000

OTHER: 000

JPRS

Card 2/2

MEBEL', Dr. M. I.

Sr. Dr., Moscow Psychopathic Hosp. im. Kashchenko, -c1949-. "The Role of the Medical Nurse in a Psychopathic Hospital," Med. Sestra, No. 4, 1949;  
"Feodosiya Fedorovna Cherenkova, Distinguished Medical Nurse," Med. Sestra, No. 4, 1949;



MEBEL, M.I.

MEBEL, M.I.

25303 MEBEL, M.I. Kliniko-Anatomicheskie Paralleli V Grupoe Starcheskogo  
Slaboumiya. Sbornik Nauch. Rabot Psikhiatr. Bol'nitsy D. Kashchenko.  
No. 6, 1949. S. 143-52

SO: Letopis' No. 33, 1949

EXCERPTA MEDICA Sec 6 Vol 13/2 Internal Med. Aug 50

4525. INFERIOR PYELOTOMY - Die Pyelotomia inferior - Mebel M. Urol.  
Klin., Inst. für Arztl. Fortbild. und Urol. Abt., Botkin-Krankenh., Moskau  
- Z. UROL. 1958, 51/7 (427-432) Illus. 3

It is demonstrated on the basis of anatomical observations that posterior pyelotomy, at present the most widely used method of pyelotomy, is not free from danger for the organ operated on. Damage to the retropelvic arteries and veins is possible. The author strongly prefers inferior pyelotomy, the technique of which is described. This operation has been carried out in 268 cases, and the results, even in cases of intrarenal renal pelvis, prove its value. In 82% of all cases there was no need to mobilize the kidney; the operation could be carried out in situ.

Muller - Mariánské Lázně (IX, 6)

MEBEL', M.Ye., Cand Med Sci -- (diss) " Lower  
pyelolithotomy." Mos, 1958, 13 pp (Min of Health  
USSR. Central Inst for the Advanced Training of  
Physicians) 200 copies (KL, 28-5b, 110)

- 90 -

MEBEL', M.Ye.

Treatment of urolithiasis; review of foreign literature. Urologia  
23 no.4:69-74 J1-Ag '58 (MIRA 11:8)

1. Iz urologicheskoy kliniki (zav. - prof. A.P. Frumkin) Tsentral'nogo  
instituta usovershenstvovaniya vrachev.  
(URINARY TRACT, calculi  
ther., review (Rus))

MEBEL', M.Ye.

Anatomic principles of lower pyelolithotomy. Urologia 22 no.6:9-14  
H-D '57. (MIRA 11:2)

1. Iz kafedry urologii (zav. - prof. A.P. Frumkin) Tsentral'nogo  
instituta usovershenstvovaniya vrachey.

(KIDNEYS, calculi

surg. anat. of lower pyelolithotomy)

GOLIGORSKIY, S.D.; PYTEL', A.Ya.; SHISHOV, I.F.; DZHAVAD-ZADE, M.D.;  
RYABINSKIY, V.S.; MEBEL', M.Ye.; YAKUBSON, B.S.; YAZHGUR, F.M.

Reports. Urologia 25 no.1:83-93 Ja-F '60. (MIRA 15:6)  
(UROLOGY---ABSTRACTS)

MEBEL', M.Ye., doktor med.nauk

Restoration of total defects of the ureter; experimental  
study. Urologiia no.6:19-25 '64.

(MIRA 18:11)

1. Urologicheskaya klinika (zav. - doktor med.nauk M.Ye.  
Mebel') bol'nitsy Fridrikhskhayn, Berlin, Germanskaya  
Demokraticeskaya Respublika.

MEBEL', M.Ye., doktor med. nauk

Complications in extracting ureteral calculi with the ureteral  
loop. Urologiia. 29 no.2:21-23 Mr-Apr '64. (MIRA 18:7)

1. Urologicheskaya klinika (zav. M.Ye.Mebel') bol'nitsy Fridrikhskhayn,  
Berlin, Germanskaya Demokraticheskaya Respublika.



ACC NR: AT6033685

SOURCE CODE: UR/3231/66/000/001/0010/0030

AUTHOR: Vartanova, L. Yu.; Zhelankina, T. S.; Mebel', S. S.; Pyatetskiy-Shapiro, I. I.

ORG: none

12

TITLE: Determining the focal depth of an earthquake with the aid of a digital electronic computer

SOURCE: AN SSSR, Institut fiziki Zemli. Vychislitel'naya seysmologiya, no. 1, 1966.  
Analiz seysmicheskikh nablyudeniy na elektronnykh mashinakh (Use of electronic computers in the analysis of seismic observations), 10-30

TOPIC TAGS: earthquake, seismic modeling, computer application, seismic wave

ABSTRACT: This work is a continuation of a previous investigation (I. I. Pyatetskiy - Shapiro et al. DAN SSSR, 1963, 151, no. 2, 323) with the difference that it deals with an iterative process of the successive automatic identification of the pP and sP waves, determination of the corresponding values of the focal depth, and more precise pinpointing of the epicenter, given the time of the first few arrivals (up to five) recorded at a certain number of stations and the travel-time curves of the P-group waves. It is shown that the problem reduces to the

Card 1/2

UDC: 550.34-517:681.142.35

ACC NR: AT6033685

simple selection of matching values and corresponding computer flow charts are presented. The computerized experimental verification of data on 121 earthquakes indicates that the problem of determining the focal depth  $h$  from among all the normally possible values (from 0 to 790 km) does not always have a unique solution. Hence, further calculations must also be regarded as experimental with the principal purpose of accumulating data for elaborating the criterions for the selection of the optimal solution. Even in its present state, however, this method produces more complete, and hence also more reliable results than manual calculations. The authors are deeply indebted to N. V. Kondorskaya for assistance in selecting the data of the USSR Seismological Service and for valuable suggestions. Orig. art. has: 8 tables, 4 figures, and 15 formulas.

SUB CODE: 08, 09, 12/ SUBM DATE: none/ ORIG REF: 003/ OTH REF: 002  
ATD PRESS: 5106

Card 2/2

ALL NR: AT6033686

SOURCE CODE: UR/3231/66/000/001/0031/0053

AUTHOR: Kondorskaya, N. V.; Zhelankina, T. S.; Mebel', S. S.; Vartanova, L. Yu.

ORG: none

TITLE: Certain results of using an electronic computer to collate seismic observations

SOURCE: AN SSSR. Institut fiziki Zemli. Vychislitel'naya seysmologiya, no. 1, 1966.  
Analiz seysmicheskikh nablyudeniy naelektronnykh mashinakh (Use of electronic computers in the analysis of seismic observations), 31-53

TOPIC TAGS: electronic computer, data analysis, earthquake, seismologic station, computer program

ABSTRACT: The article analyzes the experience gained in the more precise determination of the coordinates of earthquake epicenters with the aid of an electronic computer by the method described by I. I. Pyatetskiy-Shapiro et al. (DAN SSSR, 1963, 151, no. 2, 323) (the "EPI-1" program). The epicenter coordinates were determined by the USSR Meteorological Service when drafting composite seismic bulletins for the period from the 4th quarter of 1960 until 1963. The use of the EPI-1 program proved beneficial in that it increased the number of the determined epicenters by a factor of 1.5, enhanced the accuracy of their determination, and

Card 1/2

ACC NR: AT6033686

led to the solution of additional problems: a) an averaged law of the distribution of closing errors  $f_k$  (deviations from the standard Jeffreys-Bullen hodograph) was found for seismic stations in the USSR; b) the accuracy of determination of the epicenters of earthquakes occurring in various parts of the terrestrial globe (Central Asia, Kuriles-Kamchatka Arc, Japan, Alaska, California, etc.) is estimated, with the regions being divided into 4 groups according to the accuracy of determination; c) the possibility of the coincidence of findings with respect to the accuracy of determination of epicenter coordinates is proved as regards observational findings from ~90 foreign stations and 14 Soviet stations with enhanced accuracy of observations. The dependence of the accuracy of determination of epicenter coordinates on the depth of the earthquake focus is demonstrated. "In conclusion, the authors are indebted to V. I. Keylis-Borok for his comments on this project." Orig. art. has: 7 figures, 8 formulas, 6 tables.

SUB CODE: 09 08 27 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 004

Card 2/2

MEBES K.

62. Rapid quantitative determination of the radioactivity of cores — K. MEBES (Foldatit Koolony — Vol. 85, 1956, No. 4, pp. 351-355, 1 fig., 1 tab.)

GP

A substance in radioactive equilibrium is added in increasing quantities to an inactive substance the specific gravity of which is identical to that of the rock to be tested. In this way a series is obtained whose uranium content is known. If the radioactivity of each member of the series is measured, and the uranium content, and the number of impulses per minute are known, a concentration curve can be plotted which shows the quantity of radioactive substances in the core in uranium equivalents, in percentage or grams per tonne as a function of the number of impulses per minute.

GP

for

Mebilicin, V.D

ALBANIA / Cosmochemistry. Geochemistry. Hydrochemistry.

D

Abs Jour : Ref Zhur - Khimiya, No 14, 1959, No. 49013

Author : Llappickij, A. V. and Mebilicin, V. D.

Inst : Tirana University

Title : Note on the Geochemical Properties of Niobium and Tantalum

Orig Pub : Bul Univ shtoter Tiranos Ser shkenc Natyr, 12, No 2, 127-131 (1958)

Abstract : Nb and Ta possess a weak tendency to geochemical migration which is explained by the very low solubility of their compounds and by the thermal stability of these compounds. Both of the above facts are in agreement with published data on the lattice energies of Nb- and Ta-minerals.  
-- N. Borling

Card 1/1

MIMINOVSHVILI, S.Ya.; RUKHADZE, T.I.; KUZNETSOVA, N.Kh.; MEBONYAY, L.E.;  
DEKANOZISHVILI, M.Ya.; KALANDIYA, N.G.; ZARZHETSKAYA, A.S.

Active detection of glaucoma among the rural inhabitants of the Abkhazian  
A.S.S.R.. Vest. oft. '73 no. 3:28-30 My-Je '60. (MIRA 14:1)  
(ABKHAZIA → GLAUCOMA)

L 8773-66 BWT(1)/EWA(h)

ACC NR: AR5018113

SOURCE CODE: UR/0271/65/000/007/A048/A049

SOURCE: Ref. zh. Avtomatika, telemekhanika i vychislitel'naya tekhnika. Svodnyy tom, Abs. 7A361

AUTHOR: Mebuke, Sh. D.; Eliashvili, G. D.

TITLE: Pulse generator for investigating GIIF-1 ferrite characteristics

CITED SOURCE: Tr. Tbilissk. n.-i. in-ta priborostr. i sredstv avtomatiz., v. 4-5, 1964, 163-175

TOPIC TAGS: pulse generator, ferrite test

TRANSLATION: The circuit and design of a laboratory pulse generator used for investigating storage-type ferromagnetic cores are described. This generator permits determining the effect of the height, number, and duration of destructive pulses on the readout-signal  $e_s$  and noise  $e_n$  voltages, the signal-to-noise ratio  $e_s/e_n$  under selected conditions, and also the quadratic coefficient which characterizes the ability of the recorded information to withstand destructive pulses. The generator comprises two principal assemblies: a programming unit and a power amplifier. The programming unit designed with standard elements (blocking oscillator, single-shot multivibrator, and gate) produces a series of square current pulses whose height and duration depend on the requirements of the core testing. These pulses are amplified by a wideband power amplifier and are applied to the test core; the latter's

Card 1/2

UDC: 62-51/52(002.2)



L 8273-66

ACC NR: AR5018113

parameters are revealed by the signals taken from a control winding of this code. 0  
Figs 14.

SUB CODE: 09

Jw

Card 2/2

MEBUKE, Ye. M.

Mebuke, Ye. M. "Materials for studying the biology of the golden pheasant (*Chrysolophus pictus* L.)." Trudy Tbilis. zootarka, Vol. I, 1949, p. 25-29, (In Georgian, resume in Russian).

SO: U-4934, 29 Oct 53, (Letopis 'Zhurnal 'nykh St. tey, No. 10, 1949).

MEBUKE, Ye. M.

Dzhanashvili, A. G., Badriashvili, M. A. and Mebuke, Ye. M. - "The problem of feeding the chimpanzee in the Tbilisi zoological park," Trudy Tbilis. zooparka, Vol. 1, 1948, p. 31-39, (In Georgian, resume in Russian)

SO: U-4034, 29 Oct 53. (Lectoria 'Zhurnal 'nykh Statey, No. 10, 1949).

MEBUKE, Ye. M.

Dzhanashvili, A. G., Mebuke, Ye. M. and Uhelidze, Ye. F. "Notes on the habitat of chameleons within the boundaries of Georgia and on their maintenance in the Tbilisi zoological park," Trudy Tbilis. zooparka, Vol. I, 1948, p. 61-66, (In Georgian, resume in Russian), - Bibliog: 5 items.

SO: U-4974, 29 Oct 53, (Letopis 'Zhurnal 'nykh Statey, No. 16, 1949).

MEBUKE, Ye.

USSR/Farm Animals - Poultry.

6-5

Abs Jour : Vopr. Zkhar - Bi l., No 1, 1957, 8712

Author : Mebuke, Ye., Gikashvili, K., Dzhashvili, L.

Inst : Veterinary Medicine.

Title : On the Periods of the Hatching and Rearing of Chickens

Orig Pub : Byul. nauchno-tekhn. inform. Gruz. n.-i. in-ta zhit. zhiv. i  
dobra i vet., 1957, No 1, 19-18.

Abstract . No abstract.

Card 1/1

MEBUKO Y. M.

USSR / Farm Animals. Poultry.

Q-4

Abs Jour: Ref Zhur-Biol., No 23, 1958, 103750.

Author : Mebuko, Ye. M., Gikashvili, K. N., Dogonadze,  
T. I.

Inst : Georgian Scientific Research Institute of  
Animal Husbandry and Veterinary Medicine.

Title : Development of High Producing Poultry Raising  
in the Georgian SSR.

Orig Pub: Byul. nauchno-tekhn. inform. Gruz. n.-i. in-ta  
zhivotnovodstva i vet., 1957, No 2, 7-9.

Abstract: No abstract.

Card 1/1

MEBURIASHVILI, Sh.

BEZHANISHVILI, Giorgiy Dimitrovich; MEBURISHVILI, Sh., redaktor;

[Rustaveli Avenue] Prospekt Rustaveli. Tbilisi, Gosizdat Gruzinskoi SSR,  
1956 63 p. (MLBA 10:5)

(Tiflis--Description)

MFC, Bedrich, inz., decorated by the "Rad kude hvězdy prave," "s  
"vynikající práci," and "za pracovní věrnost"

Ostrava experiences in using the Gas drill pipes. Geol  
průzkum 7 no.1:7-9 Ja '65.

1. Melny průzkum National Enterprise, Ostrava.



RUMANIA/Organic Chemistry - Naturally Occurring Substances  
and Their Synthetic Analogs.

G.

Abs Jour : Ref Zhur - Khimiya, No 9, 1958, 28950

Author : Bodea, C., Nuccara, E., Macea, E.

Inst : -

Title : The Auto-Oxidation of Carotenoids. II. Mechanism of the  
Formation of Epoxides and of Furanoxides of Carotene and  
of Xanthophylls During the Auto-Oxidation of  $\alpha$ - and  
 $\beta$ -Carotenes.

Orig Pub : Studii si cercetari chin, 5, No 1, 17-25 (1957) (in  
Rumanian with summaries in French and Russian)

Abstract : Among the products of the light-catalyzed autooxidation  
of  $\beta$ -carotene ( $\beta$ -I) in acetone acidified with 0.01  
N  $H_2SO_4$ , the following have been identified: mono- and  
diepoxides (EP) and monofuranoxides [TN: furanosides?]  
(FU) of I, cryptoxanthine and its mono-EP and mono-FU,  
and 'zeaxsantin' and its mono-FU.

Card 1/2

35

ROMANIA/Farm Animals. Cattle

Q-2

Abs Jour : Ref Zhur - Biol., No 19, 1958, No 88035

Author : ~~Maceo, Petru~~

Inst : Rumanian AS, Cluj Branch

Title : Study of Improving the Productivity and Yield of Cows of  
the Simmenthaler and Schwyz Breeds

Orig Pub : Studii si cercetari agron. Acad. RPR Ril. Cluj., 1956, 7,  
No 1-4, 7-17

Abstract : No abstract

Card : 1/1

PROTIVA, M.; VEJDELEK, Z. J.; JILEK, J. O.; MECER, K.

Synthetic models of hypotensive alkaloids. V. Some additional derivatives of tryptamin and 1,2,3,4,-tetrahydronorharman.  
Coll Cz chem 25 no.12:3978-3987 '59. (EEAI 9:6)

1. Forschungsinstitut für Pharmazie und Biochemie, Prag.  
(Alkaloide) (Hypotension) (Aminoethylindole)  
(Tetrahydropyridindole) (Tetrahydronorharman)

MECEK, K., Dr.; SVEJCAROVA, B.

Exercise therapy in pediatrics. *Pediat. listy*, Praha 9 no.5:304-308  
Sept-Oct 54.

1. I. detska klinika prof. Dr. Svejcara, Praha  
(EXERCISE THERAPY, in various diseases  
pediatric dis.)  
(PEDIATRIC DISEASES, therapy  
exercise ther.)

MECERA, A

CZECHOSLOVAKIA/Optics - Optical Technology

K-4

Abs Jour : Rof Zhur - Fizika, No 10, 1958, No 23817

Author : Maly M., McCone A.

Inst : Not Given

Title : Determination of Spherical Aberration of Photographic Lenses  
by the Filament Method.

Orig Pub : Zhurnal tekh. a opt., 1958, 3, No 2, 39-46

Abstract : Description of the principle of the shadow method for determining the spherical aberration of photographic lenses with the aid of one filament. A corresponding setup is described. Comparison of the measurement results is made with the theoretical calculations. The accuracy of the method is analyzed.

Card : 1/1

MECH, J.

MECH, J. Relation of a struggle. p. 8. Vol. 6, no. 14, July 1956.  
ZOLNIERZ POLSKI. Warszawa Poland.

SOURCE: EAST EUROPEAN ACCESSIONS LIST (EEAL) VOL 6 NO 4 APRIL 1957

*MECH. RI.*  
MECH. *M.* (Bumynskaya Narodnaya Respublika).

Theoretical analysis of area flooding. Neft. khoz. 35 no.9:32-37  
S '57. (MIRA 11:1)

(Oil field flooding)

MECH, M. (Rumynskaya Narodnaya Respublika)

Current problems relative to hydraulic fracturing in the  
Rumanian People's Republic. Neft. khoz. 38 no.6:13-18 Je '60.  
(MIRA 13:7)

(Rumania--Oil wells--Hydraulic fracturing)



MECH, Ye.D.  
MECH, Ye.D. (Moskva)

Problems of labor hygiene involved in the preparation of chlorpromazine. Gig.turuda i prof.zab. 1 no.3:49-51 My-Je '57.  
(MIRA 11:1)

1. Sanitarno-epidemiologicheskaya stantsiya Frunzenskogo rayona.  
(CHLORPROMAZINE)  
(DRUG INDUSTRY--HYGIENIC ASPECTS)

STEJFA, M., jr.; MAYER, P.; MECHACEK, J.; NICOVSKY, J.

Electrocardiograms with deep terminal S wave in the 2d and  
3d standard lead. Vnitřní lek. 11 no.12:1145-1151 D ' 65.

1. II. vnitřní klinika lékařské fakulty University J.E.  
Purkyne v Brně (přednosta - prof. MUDr. Jiri Polcak).

MECHACEK, Josef

SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: DVM

Affiliation: /Nymburk

Source: Prague, Veterinarstvi, Vol 11, No 9, Sept 1961; pp 350

Data: "A Contribution Regarding the Treatment of Extensive Pyometritis"

070 201643

Mechay J

Mechay J.

Mechay J. Eng. "New Building Materials in the Six-Year Plan." (Materialy nowe w budownictwie w Planie Szescioletnim). Inzynieria i Budownictwo, No. 7-8, 1949, pp. 405-409, 1 fig.

New material in recent years. The duty of rising the level of building technology as the most important argument for the necessity to increase the number of varieties of building materials. The production of new materials as a factor necessary for the lowering of building costs. Changes in raw material resources as the most important transformation in this field. The problem of localizing production of new materials, and use of industrial waste. The part played by new materials in the Six-Year Plan. The modernization of the building materials production programme is one of the basic elements in material supply during the Six-Year Plan. The article submits guiding principles in this important matter.

SO: Polish Technical Abstracts - No. 2, 1951

| TEST AND ANALYSIS INDEX                                                                                                                                                                                                                                 |  |  |  |  |  |  |  |  |  |  |  |  |                         |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|-------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| TEST AND ANALYSIS INDEX                                                                                                                                                                                                                                 |  |  |  |  |  |  |  |  |  |  |  |  | TEST AND ANALYSIS INDEX |  |  |  |  |  |  |  |  |  |  |  |  |
| F. MECHEK, V.                                                                                                                                                                                                                                           |  |  |  |  |  |  |  |  |  |  |  |  |                         |  |  |  |  |  |  |  |  |  |  |  |  |
| 1126. MANUFACTURE OF MONTAN WAX. Meček, V. (Chem. Obzor, 1947, vol. 22, 233-238; Chem. Abstr., 1946 vol. 42, 2082). The extraction of montan wax by benzene from wax coal in the Josef Jan Mine at Pila near Karlovy Vary, Czechoslovakia is described. |  |  |  |  |  |  |  |  |  |  |  |  |                         |  |  |  |  |  |  |  |  |  |  |  |  |
| C.A.                                                                                                                                                                                                                                                    |  |  |  |  |  |  |  |  |  |  |  |  |                         |  |  |  |  |  |  |  |  |  |  |  |  |
| ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION                                                                                                                                                                                                         |  |  |  |  |  |  |  |  |  |  |  |  |                         |  |  |  |  |  |  |  |  |  |  |  |  |
| ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION                                                                                                                                                                                                         |  |  |  |  |  |  |  |  |  |  |  |  |                         |  |  |  |  |  |  |  |  |  |  |  |  |

*MECHELARU*

RUMANIA/General Problems

E-1

Abs Jour : Ref Zhur - Khimiya, No 3, 1958, No 7504

Author : Berkenesku, Mechelaru

Inst : Not Given

Title : The Problems of Analytical Chemistry in Publications of  
Soviet Chemists

Orig Pub : An. Rom-Sov. Sez. Cheml, 1957, 11, No 2, 43-61

Abstract : Review of the scientific papers published in USSR in  
recent years concerning mostly the analytical classifi-  
cation, problems of sensitivity and selectivity of chem.  
reactions, separation of elements and problems of ac-  
curacy and speed of analysis.

Card : 1/1

EXCERPTA MEDICA Sec 2 Vol 12/9 Physiology Sept 59

4397. CIRCULATORY ACTION OF 1-IMIDAZOLINYMETHYL-2-(2-NAPHTHYL) INDOLE ('G 27032') IN NORMAL HUMAN SUBJECTS - Über die Kreislaufwirkung des 1-Imidazolinylmethyl-2- $\beta$ -naphthylindol (G 27032) beim gesunden Menschen - Mechelke K. and Nusser E. Med. Univ. - Klin., Heidelberg - EXPERIENTIA (Basel) 1959, 15/2 (69-70) Illus. 3

In healthy human subjects, 1-imidazolinylmethyl-2-(2-naphthyl) indole (I) like phentolamine, can greatly weaken or completely abolish the effect of adrenaline or noradrenaline on the circulation. In contrast to phentolamine, however, I causes a decrease in heart rate. (II, 18)

MECHENOV, P., kand. na. tekhn. nauki; DINCHEV, D., inzh.

Electrolysis of lead-bismuth alloys in hydrosilicofluoric acid. Min delo 17 no.6:30-35 '62.

1. Olovodobiven zavod, Kurilo.



MECHENOV, P.

"Development in the construction of water-jacketed furnace shafts for the metallurgy of lead", P. 46., (TESHKA PROMISHLENOST, Vol. 3, No. 10, 1954, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, June 1955, Uncl.

MECHENOV, P. I.

MECHENOV, P. I. - Author's abstract of a dissertation on "Sulfatizing-Roasting of Lead Concentrates in Connection with the Hydrometallurgical Method of Obtaining Lead" presented toward the academic degree of Candidate in Technical Sciences. Min Higher Education USSR. Moscow Inst of Nonferrous Metals and Gold imeni M. K. Kalinin. Chair of the Metallurgy of Heavy Metals. Moscow, 1955.

So; Knizhnaya Letopis' No 3, 1956

MECHENCY, P.

MECHENCY, P. Processes in boiling laminated materials in the metallurgic and chemical industries and in production. p. 25.

Vol. 5, No. 8, 1956.  
TEZHKA PROMISHLENOST  
TECHNOLOGY  
Sofia, Bulgaria

So: East European Accession, Vol. 6, No. 2, Feb. 1957

MECHENOV, P.; KUNCHEV, N.

MECHENOV, P.; KUNCHEV, N. Study of the influence of temperature on the quality of zinc ferrite. P. 38.

Vol. 5, no. 10, 1956  
TEZHKA PROMISHLENOST  
TECHNOLOGY  
Sofia, Bulgaria

So: East European Accession, Vol. 6, no. 3, Mar. 1957

MECHENOV, P.

MECHENOV, P. Theory and practice of lead and copper shaft melting. p. 49.

Vol. 11, No. 3, May/June 1956

MINNO DELO

TECHNOLOGY

Sofia, Bulgaria

So: East European Accession, Vol. 6, No. 2, February 1957

MECHENOV, P.

Contemporary technology of lead production.

p. 26 (TEZHKA PROMISHLENOST) Vol. 6, no. 6, June 1957,  
Sofia, Bulgaria

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3,  
March 1958

MECHENOV, P.

"Removing the bismuth from unroasted lead with elektron (Mig-alloy)."

p. 24 (Ratsionalizatsiia, Vol. 7, no. 12, Dec. 1957, Sofia, Bulgaria.)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 6, June 1958.

*Mechenov, P.I.*

136-12-6/18

AUTHORS: Mechenov, P.I. Candidate of Technical Sciences,  
and Kynchev, K.S.

TITLE: Practice at the Kurilo (Bulgaria) Lead Works for the  
Recovery of Silver from Zinc Froth (Praktika izvlecheniya  
serebra iz tsinkovoy peny na svintsovom zavode Kurilo  
(Narodnaya Respublika Bolgariya) )

PERIODICAL: Tsvetnyye Metally, 1957, No.12, pp. 30 - 35 (USSR).

ABSTRACT: At the old lead works of Kurilo, the zinc froth contains  
2 - 3% Ag and is melted in a 600-kg oil-fired rotary furnace  
(Fig.1) to which 5-10 kg of wood charcoal are added. After  
completion of fusion, the heating is stopped, oxide powders are  
removed and the charge allowed to cool. When the liquid reaches  
a temperature of 600 °C, the silver crust is removed and dis-  
tilled. The authors give details of this practice with  
materials balances (Tables 1 and 2). They analyse the results  
in terms of the equilibrium diagram for the system Ag-Zn-Pb  
and describe results of experiments on the layering of the fused  
crust. Finally, they give results of the vacuum distillation  
of an enriched Ag-Zn-Pb-Cu alloy. An editorial note indicates  
that before the advantages of the Kurilo practice can be  
realised in Soviet works, difficulties due to the introduction  
Card1/2 of manual labour into large-scale production must be overcome.



136-12-6/18  
Practice at the Kurilo (Bulgaria) Lead Works for the Recovery of  
Silver from Zinc Froth

There are 3 figures, 3 tables and 3 references, 2 of which  
are Russian and 1 German.

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Card 2/2

MECHENOV, P.; MIKHAILOV, A.

"Grade of zinc concentrates, and the technoeconomical indexes in their dressing and metallurgic treatment."

p.58 (Minno Delo, Vol. 12, no. 1, Jan./Feb. 1957, Sofia, Bulgaria)

Monthly Index of East European Accessions ( EEAI) LC, Vol. 7, No. 8, August 1958

MECHENOV, P.

"Dry classification and wet extraction of zinc waste in the Lead-Zinc Plant of Kurdzhali."

p.62 (Minno Delo, Vol. 12, no. 6, Nov./Dec. 1957, Sofia, Bulgaria)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 8, August 1958

*MECHENOV, P.I.*

MECHENOV, P.I., kand. tekhn. nauk; KYNCHEV, K.S.

Practice of extracting silver from zinc froth at the Kurilo lead  
refining plant (People's Republic of Bulgaria). Tsvet. met. 30  
no.12:30-35 D '57. (MIRA 11:1)  
(Silver ores) (Kurilo--Lead industry)

MECHENOV, P.

"Calcination of poor pyrite ores in a boiling layer."

p.22 (Tezhka Promishlenost, Vol. 7, no. 1, Jan. 1958, Sofia, Bulgaria)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 8, August 1958

MECHENOV, P I

136-1-10/20

AUTHOR: Mechenov, P.I., Candidate of Technical Sciences

TITLE: Vacuum-thermal Method for Distilling Lead and Lead and Zinc Compounds from Lead-Copper Matte (Vakuum-termicheskiy sposob vozgonki svintsa, svintsovykh i tsinkovykh soyedineniy iz svintsovo-mednogo shteyna)

PERIODICAL: Tsvetnyye Metally, 1958, No.1, pp. 48 - 52 (USSR).

ABSTRACT: The work described was devoted to the problem of the separation by distillation of the lead and zinc compounds from the other components ( $\text{Cu}_2\text{S}$ ,  $\text{FeS}$ ,  $\text{Al}_2\text{O}_3$ ,  $\text{FeO}$ ,  $\text{SiO}_2$ , etc.) of lead-copper matte. The theory of the work was based on the vapour pressure versus the temperature curves of the components (Fig.1) and experiments were made on a laboratory scale. Matte from the Kurila Works (Zavod Kurily) was used, consisting of 33.66% Pb, 21% Cu, 15.44% Fe, 5.32% Zn, 20.29% S and 2.85%  $\text{Al}_2\text{O}_3$  and melting at  $840^\circ\text{C}$ . Weighed 2-g samples were heated in a tube furnace under vacuum, the loss in weight of the sample and its composition being determined. Different series of experiments were carried out at  $140^\circ\text{C}$  and 1.4 - 1.8 mmHg, at  $600 - 900^\circ\text{C}$  and 0.5-0.6 mmHg and at  $900, 800$  and  $700^\circ\text{C}$  and 1.0 mmHg, the durations of experiments in the respective series being 25, 60 and 20 min. In further

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136-1-10/20

Vacuum-thermal Method for Distilling Lead and Lead and Zinc Compounds  
from Lead-Copper Matte

series at 900 °C, durations were 10, 20 and 30 min. and experiments at this temperature were also continued for 20 min at 1, 6 and 12 mmHg. The experiments showed that the method could be used without special dust catchers, and established the main conditions for the vacuum-thermal distillation of PbS, PbO, Pb and ZnS from works matte. Lead and zinc recoveries in the condensate were 99 and 90%, respectively, and the residue was suitable for converter treatment to recover copper. There are 6 figures, 1 table and 5 references, 4 of which are Russian and 1 Polish.

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Card 2/2

S/137/62/000/004/034/201  
A006/A101

1P. 1240

AUTHORS: Mechenov, P., Bratanov, V., Sotirov, B.

TITLE: A new method of obtaining a lead-calcium alloy

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 4, 1962, 36, abstract 4G229  
("Minno delo i metalurgiya", 1961, v. 16, no. 7, 20 - 23, Bulgarian;  
Russian and German summaries)

TEXT: The basic principle of the method is the aluminum-thermal reaction of CaO reduction to Ca metal, which is alloyed with Pb. This reaction proceeds at a normal pressure in a definite temperature range and in the presence of a proper flux ( $\text{CaCl}_2 + \text{NaCl}$ ) and Pb metal. When using a flux which consists of an eutectic mixture of  $\text{CaCl}_2 + \text{NaCl}$ , and 700 - 750°C temperature, a Pb-Ca-alloy with 2 - 3% Ca was obtained within one hour.

G. Svodtseva

[Abstracter's note: Complete translation]

Card 1/1



S/137/62/000/012/012/085  
A006/A101

AUTHORS: Mechenov, P., Dinchev, D.

TITLE: On the electrolysis of lead-bismuth alloys in a silicon-hydrogen-fluoride electrolyte

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 12, 1962, 20,  
abstract 12G146 ("Minno delo i metalurgiya", 1962, v. 17,  
no. 6, 30 - 35, Bulgarian)

TEXT: Laboratory tests have shown that the optimum duration of electrolysis is determined by the Bi and Pb amount in the slurry and depends upon the technical process of slurry processing. Higher  $D > 130 \text{ amp/m}^2$  increases the Pb and Bi transition from the anode to the slurry; therefore it is recommended to maintain  $D$  under industrial conditions within a range from 100 - 130  $\text{amp/m}^2$ , so that 70% - 76% Bi extraction from the anode to the slurry will be possible. At a high Bi content in the anode, up to 85% Bi can be extracted into the slurry. The preliminary concentration of Bi-dross assures improved indices of electrolysis.

[Abstracter's note: Complete translation]

Ya. Gallyay

Card 1/1

MECHER, T.

Synthesis of *DL*-noradrenaline and of related amino alcohols with a primary amino group. Gábor Fodor, Odon Kovács, and Tibor Mecher (Univ. Szeged, Ázta. Chím. Acad. Sci. Hung., 1958-4022:1961) (in English).--A new synthesis of Adrenaline and of related *N*-substituted amino alcs. starting with hydroxyaryl glyoxals was extended to noradrenaline and similar compds. *p*-HOC<sub>6</sub>H<sub>4</sub>COCH<sub>2</sub>NH<sub>2</sub>·Ph (I), m. 131-2°, was prepd. by reducing *p*-HOC<sub>6</sub>H<sub>4</sub>COCHO hydrate or its KHSO<sub>5</sub> addn. product with Raney Ni in the presence of PhCH<sub>2</sub>NH<sub>2</sub>. The products were identical and the yields were 82 and 79%, resp. Reduction of I with Raney Ni gave PhCH<sub>2</sub>NHCH<sub>2</sub>CH(OH)·Ph (II), m. 126-0°. Norsynephrine, m. 177-8°, was obtained in excellent yields by reducing (Pd-C) the HCl salts of I or II. A mixt. of PhCH<sub>2</sub>NH<sub>2</sub> (0.075 mole) and 3,4-(HO)C<sub>6</sub>H<sub>3</sub>COCHO (0.05 mole) was reduced over prehydrogenated Raney Ni to give a 73% yield of 3,4-(HO)C<sub>6</sub>H<sub>3</sub>COCH<sub>2</sub>NHCH<sub>2</sub>Ph, m. 147-8°; HCl salt (III), m. 220-1°. Reduction of II over Pd-C gave noradrenaline (82% yield), m. 189-9°. A mixt. of 3,4-MeO(HO)C<sub>6</sub>H<sub>3</sub>COCHO·KHSO<sub>5</sub> and PhCH<sub>2</sub>NH<sub>2</sub> was reduced (Raney Ni) to give 75% 3,4-MeO(HO)C<sub>6</sub>H<sub>3</sub>COCH<sub>2</sub>NHCH<sub>2</sub>Ph·HCl (IV), m. 221-2°. Reduction (Pd-C) of IV gave II·NCH<sub>2</sub>CH(OH)C<sub>6</sub>H<sub>3</sub>(OH)·OMe·4.3.HCl, m. 192-3°. 3,4-HO(MeO)C<sub>6</sub>H<sub>3</sub>COCHO (V), m. 129°, was prepd. by refluxing 3,4-AcO(MeO)C<sub>6</sub>H<sub>3</sub>COMe with SeO<sub>2</sub>. 2-(3-Hydroxy-4-methoxyphenyl)-quinoxaline, m. 142-3° (from dil. EtOH), was prepd. from V and  $\alpha$ -C<sub>6</sub>H<sub>5</sub>(NH<sub>2</sub>)<sub>2</sub> in hot aq. soln. Reduction (Raney Ni) of V with PhCH<sub>2</sub>NH<sub>2</sub> gave 3,4-HO(MeO)C<sub>6</sub>H<sub>3</sub>COCH<sub>2</sub>NHCH<sub>2</sub>Ph (VI), m. 228° (from EtOH). Lower yields were obtained with the glyoxal in stock soln. H<sub>2</sub>NCH<sub>2</sub>CH(OH)C<sub>6</sub>H<sub>3</sub>(OMe)<sub>2</sub>·H<sub>2</sub>O was prepd. by reducing (Pd-C) VI in EtOH. A mixt. of *p*-HOC<sub>6</sub>H<sub>4</sub>COCHO·KHSO<sub>5</sub> and Et<sub>3</sub>NH<sub>2</sub> absorbed 1 mole of H (Raney Ni), but only a hydroxy ketone, presumably *p*-HOC<sub>6</sub>H<sub>4</sub>COCH<sub>2</sub>OH, was obtained. W. T. S.

MASSZI, Jozsef; MECHER, Tibor

The effect of corticosteroids on catalase activity. Kiserl.  
orvostud. 15 no.6:567-572 D '63.

1. Budapesti Orvostudományi Egyetem Borklinikája és Országos  
Bor- Nemikortani Intézete.

(CATALASE) (PREDNISOLONE) (CORTISONE)  
(HYDROCORTISONE) (DIOXANES) (PHARMACOLOGY)

MECHERET, I.B.

Use of photography by geography teachers. Geogr. v shkole 19 no.3:  
57-58 My-Je '56. (MIRA 9:9)  
(Geography--Study and teaching) (Visual aids)